

Application No.: 09/915,515

Docket No.: 21663-00193-US

REMARKS

Claims 1-12 and 14-21 are now in the application. Claims 1-6, 9-14 and 21 are directed to the elected invention. Claims 7, 8 and 15-20 are drawn to non-elected invention and may be cancelled by the Examiner upon the allowance of the claims directed to the elected invention.

Claim 1 has been amended for purposes of clarification and not to limit its original scope. Claim 4 has been amended to render it consistent with language in Claim 1. The dependency of claim 14 has been changed because of the cancellation of claim 13. Claims 1, 13, 14, 16, 17, 19 and 20 have been amended to correct the spelling of "hemagglutinin." Claims 9-12 have been amended to correct the spelling of "Hemagglutinin neuraminidase".

Claims 1-6, 9-14 and 21 were rejected under 35 USC §112, second paragraph as being indefinite. This rejection of the claims has been overcome by the amendments to the claims and/or is not deemed tenable. In particular, claim 1 no longer recites "using."

Concerning support for the SEQ ID NO. 1, both a computer readable form and hard copy thereof were filed with the original application papers. Moreover SEQ ID NO 1 and its active sites are discussed in the specification in the paragraph bridging pages 7 and 8.

The objections to claims 1 and 13 have been obviated. In particular, claim 1 now recites "a" and correctly spells "hemogglutinin," Claim 13 has been cancelled.

Claims 1-6, 9-14 and 21 were rejected under 35 USC §112, first paragraph. The Examiner has stated that the specification fails to describe either the Sequence ID No. 1 or the particular residues recited in the claim.

Claims 1-6, 9-14 and 21 were also rejected under 35 USC §112, first paragraph, based on the specification not disclosing suitable algorithms or implementations of the method steps.

These rejections are not deemed tenable since, as discussed above, the specification clearly discloses SEQ ID NO 1 and the active sites. Both a computer readable form and hard

Application No.: 09/915,515

Docket No.: 21663-00193-US

copy of SEQ ID NO 1 were filed with the original papers. Also, SEQ ID NO 1 and its active sites are discussed in the paragraph bridging pages 7 and 8 of the specification.

In addition, persons skilled in the art, once aware of the present application, would be able to implement the process without undue experimentation. Along these lines, see Babu et al., BCX-1812 (RWJ-270201): Discovery of a Novel, Highly Potent, Orally Active, and Selective Influenza Neuraminidase Inhibitor Through Structure -Based Drug Design; Journal of Medicine Chemistry, Volume 43, No. 19, pages 3482-3486 (copy enclosed). This article is illustrative of the literature that shows using the crystal structure along with identifying active sites to identify potential inhibitors of an enzyme.

In addition, even if some experimentation is necessary, enablement is not precluded. Only undue experimentation causes an enablement problem. See *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 231 USPQ 81 (Fed. Cir. 1986).

Claims 1-6, 9-13 and 21 were rejected under 35 USC 112, first paragraph. The Examiner stated that these claims are not enabled for the design of inhibitors or method for identifying a potential inhibitor of any paramyxovirus Hemagglutinin-neuraminidase. This rejection is not deemed tenable since persons skilled in the art, once aware of the present disclosure could practice the invention as recited in these claims without undue experimentation. Moreover, persons skilled in the art can readily understand the scope of protection provided by the claims. Concerning 35 USC 112, paragraph 1, one should be mindful of the following comments by the Court in the case of *In re Goffe*, 191 USPQ 431:

For all practical purposes, the Board would limit appellant to claims involving the specific materials disclosed in the examples, so that a competitor seeking to avoid infringing the claims would merely have to follow the disclosure in the subsequently-issued patent to find a substitute. However, to provide effective incentives, claims must adequately protect inventors. To demand that the first to disclose shall limit his claims to what he has found will work or to materials which meet the guidelines specified for 'preferred' materials in a process such as the one herein involved would not serve the constitutional purpose of promoting progress in the useful arts.

Application No.: 09/915,515

Docket No.: 21663-00193-US

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 21663-00193-US from which the undersigned is authorized to draw.

Dated: May 21, 2004

Respectfully submitted

By 

Burton A. Amernick

Registration No.: 24,852

CONNOLLY BOVE LODGE & HUTZ LLP

1990 M Street, N.W., Suite 800

Washington, DC 20036-3425

(202) 331-7111

(202) 293-6229 (Fax)

Attorney for Applicant